

Please amend the Application as follows.

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings of claims in the application.

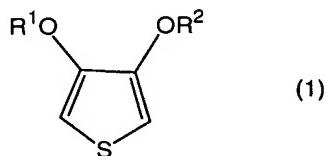
Claim 1 (Cancelled)

Claim 2 (Cancelled)

Claim 3 (Cancelled)

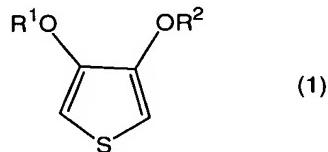
Claims 4 - 6 (Cancelled)

Claim 7 (New): A method for producing an aqueous dispersion containing a complex of a poly(3,4-alkylenedioxythiophene) and a polyanion comprising: polymerizing a 3,4-alkylenedioxythiophene represented by formula (1):



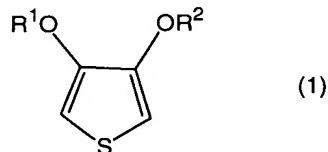
wherein R¹ and R² together form a C<sub>1-4</sub>-alkylene group which is optionally substituted, wherein the polymerization is performed in the presence of the polyanion by using peroxodisulfuric acid as an oxidizing agent in an aqueous solvent and wherein the pH during polymerization is 1.5 or less.

Claim 8 (New): A method for producing an aqueous dispersion containing a complex of poly(3,4-dialkylenedioxythiophene) and a polyanion comprising: polymerizing a 3,4-alkylenedioxythiophene represented by formula (1):



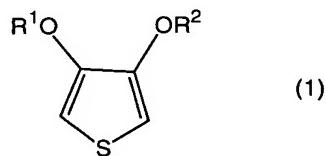
wherein R<sup>1</sup> and R<sup>2</sup> together form a C<sub>1-4</sub>-alkylene group which is optionally substituted, and wherein the polymerization is performed in the presence of the polyanion by using peroxodisulfuric acid as an oxidizing agent in an aqueous solvent, in which an acid selected from the group of water-soluble inorganic acids and water-soluble organic acids is added so as to lower pH of the resultant reaction mixture to 1.5 or less.

Claim 9 (New): A method for producing an aqueous dispersion containing a complex of a poly(3,4-dialkoxythiophene) and a polyanion comprising: polymerizing a 3,4-dialkoxythiophene represented by formula (1):



wherein R<sup>1</sup> and R<sup>2</sup> are C<sub>1-4</sub>-alkyl groups, wherein the polymerization is performed in the presence of the polyanion by using peroxodisulfuric acid as an oxidizing agent in an aqueous solvent and wherein the pH during polymerization is 1.5 or less.

Claim 10 (New): A method for producing an aqueous dispersion containing a complex of poly(3,4-dialkoxythiophene) and a polyanion comprising: polymerizing a 3,4-dialkoxythiophene represented by formula (1):



wherein R<sup>1</sup> and R<sup>2</sup> are C<sub>1-4</sub>-alkyl groups, and wherein the polymerization is performed in the presence of the polyanion by using peroxodisulfuric acid as an oxidizing agent in an aqueous solvent, in which an acid selected from the group of water-soluble inorganic acids and water-soluble organic acids is added so as to lower pH of the resultant reaction mixture to 1.5 or less.